



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------------|------------------------|
| 09/443,863 | 11/19/1999 | INDU PARIKH | 28069-546 | 7862 |
| 35437 7590 12/04/2009 MINTZ LEVIN COHN FERRIS GLOVSKY & POPEO ONE FINANCIAL CENTER BOSTON, MA 02111 | | | EXAMINER KISHORE, GOLLAMUDI S | |
| | | | ART UNIT 1612 | PAPER NUMBER |
| | | | MAIL DATE 12/04/2009 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/443,863

Applicant(s)

PARIKH ET AL.

Examiner

GOLLAMUDI S. KISHORE

Art Unit

1612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-52, 54, 56-75, 77, 79-95, 97-104 and 108-131 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-52, 54, 56-75, 77, 79-95, 97-104 and 108-131 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The RCE dated 9-28-09 is acknowledged.

Claims included in the prosecution are 50-52, 54, 56-75, 77, 79-95, 97-104 and 108-131.

Claim Rejections - 35 USC ' 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 50-52, 54, 56-75, 77, 79-95, 97-104 and 108-131 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/07414 (on record) in view of either Green (5,976,577) of record or Venkatesh (6,475,510).

WO discloses the same process of preparation for the rapidly dispersing oral dosage forms of hydrophobic compounds wherein the particles are coated with at least two surfactants; one of the surfactants is a phospholipid (surface modifying agent). The average particle sizes of the hydrophobic compound are less than 10 microns. The composition contains other claimed materials such as celluloses and mannitol. The process of preparation involves the mixing of the components (water insoluble active agent and the surface modifying agents) in an aqueous medium, sonicating it and lyophilizing the composition to form particles (note the abstract, page 2, line 25 through page 8, line 19, Examples and claims). WO further teaches that the lyophilized powders can be converted into granules or tablets with the addition of binders and other

excipients known in the art of tablet making (page 4, lines 14-17). What is lacking in the process of WO is the additional step of adding rapidly dispersible matrix-forming releasing agents to prepare rapidly disintegrating solid dosage form.

Green (5,976,577) discloses fast dispersing solid dosage forms of various drugs. The particles in Green are coated with polymers and lipid materials such as fatty acids (surfactants) and phospholipids. According to Green, the carrier material, which aids the rapidly disintegrating network, includes microcrystalline cellulose, mannitol, sorbitol and gelatin (abstract, col. 3, lines 43-60, col. 5, lines 30-48, col. 8, lines 20-31, Examples and claims, claim 12 in particular).

Venkatesh similarly discloses fast dispersing solid dosage forms of various drugs. The particles are coated with phospholipids in Venkatesh. According to Venkatesh, the carrier material includes mannitol, sorbitol and xylitol (abstract, col. 5, lines 8-39, col. 6, lines 9-35, col. 7, lines 39-67 and examples).

To add the step of the addition of bulking and releasing agents such as mannitol, microcrystalline cellulose and sorbitol in the method of preparation of WO, if the desired goal is to make the tablets of WO as rapidly disintegrating tablets, would have been obvious to one of ordinary skill in the art at the time the invention was made since the references of Green and Venkatesh each teach that these agents would enable the tables to disintegrate rapidly.

Applicant's arguments based on the declaration by Indu Parikh have been fully considered, but are not persuasive. Applicant argues that the declaration establishes that the 414 publication was derived from his work and therefore, not publication by

another, and thus cannot be prior art under 35 U. S. C 102 (a) or 103 (a). In response to the examiner's position that the inventive entity in 414 is different from the inventive entity of instant application and therefore the WO reference still qualifies under 103 (a), applicant provides another declaration. In this declaration, applicant states, "I am an author of the '414 publication, entitled "Compositions Comprising Microparticles of Water-insoluble Substances and Method for Preparing Same" cited in the instant 103(a) rejection. I make this declaration to establish that the contributions of Ulagaraj Selvaraj, the co- inventor of '414, include selecting a surfactant(s) that provide volume-weighted mean particle size values of the water-insoluble compound at least 50% smaller than particles produced without the presence of the Surfactant using the same energy input. I assert that Ulagaraj Selvaraj did not invent the subject matter relied on by the Examiner in his rejection of claims 50-52, 54, 56-75, 77, 79-95, 97-104 and 108-131 remain rejected under 35 U.S.C. §103(a) as being unpatentable over the '414 publication in view of Green or Venkatesh. As I stated in an earlier declaration filed on December 29, 2009, I invented this subject matter."

These arguments are perplexing. Instant claims are drawn to a process of preparation of the dosage form and the composition contains the surfactant(s), phospholipids. The process step b) in claim 50 is " b) subjecting the aqueous suspension to a particle fragmentation process to form a homogeneous aqueous suspension of micron and submicron particles, wherein the mean volume weighted particle size of the water-insoluble or poorly water-soluble drug particles in the suspension ranges between about 0.05 and about 10 micrometers".

This implies, contrary to applicant's declaration, Ulagaraj Selvaraj is involved in the process of preparation. Therefore, the reference still qualifies as an applicable reference.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 50-52, 54, 56-75, 77, 79-95, 97-104 and 108-131 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 5,922,355 in combination with either Green (5,976,577) or Venkatesh (6,475,510). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons. Claims in the said patent are drawn to a process of preparing microparticles of water insoluble drugs mixing the drug, a phospholipid and another surfactant and applying energy to reduce the particle sizes. Claims in instant application recite the same steps

with further inclusion of a step of adding bulking /releasing agents to prepare rapidly disintegrating solid preparations. What is lacking in the patented claims reciting 'comprising the steps of' is the addition of bulking/releasing agents to prepare rapidly disintegrating solid dosage forms.

Green (5,976,577) discloses fast dispersing solid dosage forms of various drugs. The particles in Green are coated with polymers and lipid materials such as fatty acids (surfactants) and phospholipids. According to Green, the carrier material, which aids the rapidly disintegrating network, includes microcrystalline cellulose, mannitol, sorbitol and gelatin (abstract, col. 3, lines 43-60, col. 5, lines 30-48, col. 8, lines 20-31, Examples and claims, claim 12 in particular).

Venkatesh similarly discloses fast dispersing solid dosage forms of various drugs. The particles are coated with phospholipids in Venkatesh. According to Venkatesh, the carrier material includes mannitol, sorbitol and xylitol (abstract, col. 5, lines 8-39, col. 6, lines 9-35, col. 7, lines 39-67 and examples).

To add the step of the addition of bulking and releasing agents such as mannitol, microcrystalline cellulose and sorbitol in the method of preparation of 5,922,355, if the desired goal is to make rapidly disintegrating tablets, would have been obvious to one of ordinary skill in the art at the time the invention was made since the references of Green and Venkatesh each teach that these agents would enable the tables to disintegrate rapidly. Instant fenofibrate is deemed to be anticipated by the patented claims, which recite generic water insoluble drug.

Applicant's arguments have been fully considered, but are not persuasive.

Applicant argues that claims 1-11 of Parikh I do not teach or suggest a process for the preparation of a rapidly disintegrating solid dosage form comprising a concentration of the phospholipid in the aqueous suspension ranges from 0.1 to 90 % with a mean volume weighted particle sizes of the water-insoluble drug particles in the suspension that ranges between about 0.05 to 10 micrometers. They also do not teach or suggest a solid dosage form with at least two rapidly dispersible matrix-forming agents said at least two rapidly dispersible matrix-forming agent being present in an amount of between 0.1 % and 90 % of the aqueous suspension wherein upon reconstitution in an aqueous environment, the suspension has no more than about 20 % of particle aggregation or agglomeration compared with the amount of aggregation or agglomeration of the particles comprising a pre-dried suspension. Applicant further argues that claims 1-11 of Parikh I do not encompass a process for the preparation of a rapidly disintegrating solid dosage form having surface stabilized drug particles dispersed and embedded throughout a support matrix formed by the at least two matrix-forming bulking/releasing agents, or combination thereof, wherein the support matrix dissolves or substantially disperses in a rapid disintegration time of less than 2 minutes upon contact between the solid and aqueous environment resulting in a release of the surface stabilized drug particles into the aqueous environment as a suspension; and further wherein, after contact between the solid and the aqueous environment, the resulting suspension comprises no more than about 20% by weight of aggregated or agglomerated primary particles.

These arguments are not persuasive. The patented claims are generic with respect to the amount of the phospholipid and the particle sizes. With regard to the rapidly disintegrating form of the composition, the examiner points out that both Green and Venkatesh teach the addition of the carriers to achieve this function and therefore, one of ordinary skill in the art would be motivated to add the step of the addition of bulking and releasing agents in the process of 355 patent if the desired goal is the preparation of a rapidly disintegrating composition. Applicant's arguments with regard to Parikh II and III are similar and therefore, similar response is applicable.

5. Claims 50-52, 54, 56-75, 77, 79-95, 97-104 and 108-131 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 4-25, 45-47, 52-53, 55-56, 65 and 101-119 of copending Application No. 10/260,788 in combination with either Green (5,976,577) or Venkatesh (6,475,510). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons. Claims in the said copending application are drawn to a process of preparing microparticles of water insoluble drugs mixing the drug, a phospholipid and another surfactant and applying energy to reduce the particle sizes. Claims in instant application recite the same steps with further inclusion of a step of adding bulking /releasing agents to prepare rapidly disintegrating solid preparations. What is lacking in the claims of the copending application reciting 'comprising the steps of' is the addition of bulking/releasing agents to prepare rapidly disintegrating solid dosage forms.

Green (5,976,577) discloses fast dispersing solid dosage forms of various drugs. The particles in Green are coated with polymers and lipid materials such as fatty acids (surfactants) and phospholipids. According to Green, the carrier material, which aids the rapidly disintegrating network, includes microcrystalline cellulose, mannitol, sorbitol and gelatin (abstract, col. 3, lines 43-60, col. 5, lines 30-48, col. 8, lines 20-31, Examples and claims, claim 12 in particular).

Venkatesh similarly discloses fast dispersing solid dosage forms of various drugs. The particles are coated with phospholipids in Venkatesh. According to Venkatesh, the carrier material includes mannitol, sorbitol and xylitol (abstract, col. 5, lines 8-39, col. 6, lines 9-35, col. 7, lines 39-67 and examples).

To add the step of the addition of bulking and releasing agents such as mannitol, microcrystalline cellulose and sorbitol in the method of preparation in the claims of said copending application, if the desired goal is to make rapidly disintegrating tablets, would have been obvious to one of ordinary skill in the art at the time the invention was made since the references of Green and Venkatesh each teach that these agents would enable the tables to disintegrate rapidly. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the copending application are drawn to the same process of preparation and the products resulting from said process and the process is directed to water insoluble drugs. 'Insoluble drugs' in said copending application anticipate instant species of water insoluble drug, fenofibrate.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant's arguments have been fully considered, but are not persuasive. Applicant cites M.P.E.P section 1504. This argument is not persuasive since the double patenting rejection is not the only rejection in this application.

6. Claims 50-52, 54, 56-75, 77, 79-95, 97-104 and 108-131 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11-19, 23-24, 27-37 of copending Application No. 09/443,862 in combination with either Green (5,976,577) or Venkatesh (6,475,510). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons. Claims in the said copending application are drawn to a process of preparing microparticles of water insoluble drugs mixing the drug, a phospholipid and another surfactant. Claims in instant application recite the same steps with further inclusion of a step of adding bulking /releasing agents to prepare rapidly disintegrating solid preparations. What is lacking in the claims of the copending application reciting 'comprising the steps of' is the addition of bulking/releasing agents to prepare rapidly disintegrating solid dosage forms.

Green (5,976,577) discloses fast dispersing solid dosage forms of various drugs. The particles in Green are coated with polymers and lipid materials such as fatty acids (surfactants) and phospholipids. According to Green, the carrier material, which aids the rapidly disintegrating network, includes microcrystalline cellulose, mannitol, sorbitol and

gelatin (abstract, col. 3, lines 43-60, col. 5, lines 30-48, col. 8, lines 20-31, Examples and claims, claim 12 in particular).

Venkatesh similarly discloses fast dispersing solid dosage forms of various drugs. The particles are coated with phospholipids in Venkatesh. According to Venkatesh, the carrier material includes mannitol, sorbitol and xylitol (abstract, col. 5, lines 8-39, col. 6, lines 9-35, col. 7, lines 39-67 and examples).

To add the step of the addition of bulking and releasing agents such as mannitol, microcrystalline cellulose and sorbitol in the method of preparation in the claims of said copending application, if the desired goal is to make rapidly disintegrating tablets, would have been obvious to one of ordinary skill in the art at the time the invention was made since the references of Green and Venkatesh each teach that these agents would enable the tables to disintegrate rapidly.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GOLLAMUDI S. KISHORE whose telephone number is (571)272-0598. The examiner can normally be reached on 6:30 AM- 4 PM, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krass Frederick can be reached on (571) 272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gollamudi S Kishore/
Primary Examiner, Art Unit 1612

GSK